

FEB 04 1982

TURBO OIL 2389

Form Approved
Budget Bureau No. 44-R1387
Approval Expires April 30, 1971

U.S. DEPARTMENT OF LABOR

Supersedes issue of 8/23/72

WAGE AND LABOR STANDARDS ADMINISTRATION
Bureau of Labor Standards

MATERIAL SAFETY DATA SHEET

SECTION I

| | | |
|---|---|---|
| MANUFACTURER'S NAME EXXON COMPANY, U.S.A. (A Division of Exxon Corporation) | | EMERGENCY TELEPHONE NO. A.C. 713 Day 221-3424 Night 668-7024 |
| ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 2180 Houston, Texas 77001 | | |
| CHEMICAL NAME AND SYNONYMS Synthetic Turbo Oil | | TRADE NAME AND SYNONYMS TURBO OIL 2389 |
| CHEMICAL FAMILY Organic Ester | FORMULA Polyol Esters and selected additives. | |

SECTION II HAZARDOUS INGREDIENTS

| PAINTS, PRESERVATIVES, & SOLVENTS | % | TLV (Units) | ALLOYS AND METALLIC COATINGS | % | TLV (Units) |
|---|---|-------------|--|---|-------------|
| PIGMENTS | | n.a. | BASE METAL | | n.a. |
| CATALYST | | n.a. | ALLOYS | | n.a. |
| VEHICLE | | n.a. | METALLIC COATINGS | | n.a. |
| SOLVENTS | | n.a. | FILLER METAL PLUS COATING OR CORE FLUX | | n.a. |
| ADDITIVES | | n.a. | OTHERS | | |
| OTHERS | | | | | |
| HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES | | | | % | TLV (Units) |
| | | | | | |
| | | | | | |
| | | | | | |

SECTION III PHYSICAL DATA

| | | | |
|-----------------------------------|---|--|------------|
| BOILING POINT (°F.) IBP-FBP | 690-900°F | SPECIFIC GRAVITY (H ₂ O=1) | 0.955 |
| VAPOR PRESSURE (mm Hg.) @ 20°C | <0.0001 | PERCENT VOLATILE BY VOLUME (%) | Negligible |
| VAPOR DENSITY (AIR=1) | >12 | EVAPORATION RATE (n-Butyl Acetate = 1) | <0.001 |
| SOLUBILITY IN WATER | Negligible | | |
| APPEARANCE AND ODOR | Light straw colored liquid. Bland fatty odor. | | |

SECTION IV FIRE AND EXPLOSION HAZARD DATA

| | | | |
|---|-------------------------------|-----------|------------|
| FLASH POINT (Method used) Cleveland Open Cup 450°F | FLAMMABLE LIMITS Estimated | LeI 1% | UeI 12% |
| EXTINGUISHING MEDIA Foam, dry chemical, CO ₂ , water spray or fog. | | | |
| SPECIAL FIRE FIGHTING PROCEDURES Use air-supplied rescue equipment for enclosed areas. | | | |
| Cool exposed containers with water. | | | |
| UNUSUAL FIRE AND EXPLOSION HAZARDS Do not store or mix with strong oxidants. | | | |

n.a. = not applicable

1/2/73

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
5 mg/m³ for oil mist.

EFFECTS OF OVEREXPOSURE
Prolonged or repeated skin contact may cause mild skin irritation.

EMERGENCY AND FIRST AID PROCEDURES

In case of skin contact, wash with soap and water. If splashed into eyes, flush with clear water until irritation subsides.

SECTION VI REACTIVITY DATA

| | | | |
|-----------|----------|---|---------------------|
| STABILITY | UNSTABLE | | CONDITIONS TO AVOID |
| | STABLE | X | |

INCOMPATIBILITY (Materials to avoid)
Strong oxidants like liquid chlorine and concentrated oxygen.

HAZARDOUS DECOMPOSITION PRODUCTS
Carbon monoxide in the case of incomplete combustion.

| | | | |
|-----------------------------|----------------|---|---------------------|
| HAZARDOUS POLYMERIZATION | MAY OCCUR | | CONDITIONS TO AVOID |
| | WILL NOT OCCUR | X | |

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Recover free liquid. Add absorbent to spill area.

Keep petroleum products out of streams and waterways.

WASTE DISPOSAL METHOD
Incinerate absorbed material.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)
Normally not needed.

| | | |
|-------------|--|---------|
| VENTILATION | LOCAL EXHAUST Needed only to capture hot fumes. | SPECIAL |
| | MECHANICAL (General) | OTHER |

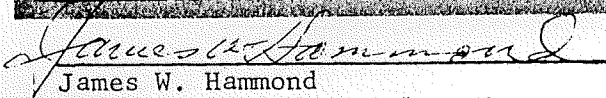
| | |
|--|--|
| PROTECTIVE GLOVES Normally not needed | EYE PROTECTION Normally not needed. |
|--|--|

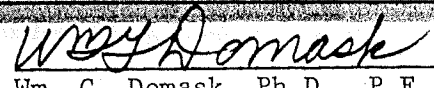
OTHER PROTECTIVE EQUIPMENT
Oil-impervious apron if needed.

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Keep containers closed. Keep away from heat and open flame.

OTHER PRECAUTIONS
Avoid breathing of oil mist. Remove oil-impregnated clothing. Wash thoroughly after exposure.


James W. Hammond
Director of Industrial Hygiene


Wm. G. Domask, Ph.D., P.E.
Government Regulations Advisor

EXXON COMPANY, U.S.A.

1800 AVENUE OF THE STARS • LOS ANGELES, CALIFORNIA 90067 • (213) 552-5591

MARKETING DEPARTMENT
AVIATION TECHNICAL SERVICES

C. H. GROVER

DPM 5109
Lubricant, Oil

July 11, 1979

Mr. M. J. Veneroso
Dept. C1-725 (52-11)
Materials Handling & Packaging Engineering
Douglas Aircraft Company
3855 Lakewood Blvd.
Long Beach, California 90846

Dear Mr. Veneroso:

In answer to your C1-725-76 of 6/12/79 concerning shipping EXXON TURBO OIL 2380, please be advised:

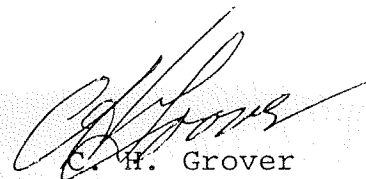
1. DOT Proper Shipping Name - None Prescribed
2. DOT Hazard Classification - None Prescribed
3. Flash Point, Cleveland Open Cup - 450°F
4. IATA Article Number - Non Restricted

Attached per your request is OSHA Material Data Sheet concerning EXXON TURBO OIL 2380.

If we can be of further assistance, please do not hesitate to advise.

Very truly yours,

EXXON COMPANY, U.S.A.


C. H. Grover

CHG:cvn